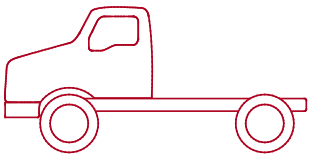
FORD MOTOR COMPANY

DO NOT DESTROY; THIS MANUAL IS REQUIRED BY LAW. KEEP UNTIL THE VEHICLE IS COMPLETED BY THE FINAL STAGE MANUFACTURER.

2015
MEDIUM TRUCK
INCOMPLETE VEHICLE MANUAL

Incomplete Vehicle Types
For This Manual



Chassis Cab

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2014

U.S. & CANADIAN MOTOR VEHICLE SAFETY STANDARDS (APPLICATION BY VEHICLE TYPE OVER 10,000 lbs. GVWR)

C/FMVSS Number	Title of Standard	Truck	Truck Tractor	Bus (Not School Bus)
101	Controls and Displays	X	X	X
102	Transmission Shift Lever Sequence, Starter Interlock, & Transmission Braking Effect	X	X	X
103	Windshield Defrosting & Defogging Systems	X	X	X
104	Windshield Wiping & Washing Systems	X	X	X
105	Hydraulic and Electric Brake Systems	X	X	X
106	Brake Hoses	X	X	X
108	Lamps, Reflective Devices, & Associated Equipment	X	X	X
111	Rearview Mirrors	X	X	X
113	Hood Latch Systems	X	X	X
116	Motor Vehicle Brake Fluids	X	X	X
119	New Pneumatic Tires for Vehicles Other Than Passenger Cars	X	X	X
120	Tire Selection & Rims for Motor Vehicles Other Than Passenger Cars	X	X	X
121	Air Brake Systems	X	X	X
124	Accelerator Control Systems	X	X	X
125	Warning Devices			
205	Glazing Materials	X	X	X
206	Door Locks & Door Retention Components	X	X	X
207	Seating System	X	X	X
208	Occupant Crash Protection	X	X	X
209	Seat Belt Assemblies	X	X	X
210	Seat Belt Assembly Anchorages	X	X	X
213	Child Restraint System	X	X	X
217	Bus Window Retention and Release			X
302	Flammability of Interior Materials	X	X	X
403	Platform Lift Systems for Motor Vehicles			X
404	Platform Lift Installations in Motor Vehicles			X
Part 565.4	Vehicle Identification Number Requirements	X	X	X

INTRODUCTION

Information in this manual is furnished pursuant to United States and Canadian safety regulations or, in some cases where the information is not required by regulation, for the convenience of intermediate or final stage vehicle manufacturers. For incomplete vehicles sold in the U.S., the descriptions and statements contained in this manual relate only to motor vehicle safety standards issued under the National Traffic and Motor Vehicle Safety Act of 1966 as amended.

The statements contained in this manual are accurate as of the date of manufacture of this incomplete vehicle and can be used by any intermediate and/or final-stage manufacturer as a basis for certification.

An incomplete vehicle manufactured for sale or importation into Canada is specially equipped for Canada. This vehicle conforms to the applicable Canadian Motor Vehicle Safety Standards (CMVSS) on the date of manufacture printed on the cover of this manual. Requirements unique to vehicles for use in Canada are identified in the Statements of Conformity section of the manual.

The Exhaust Emissions section of this manual contains information regarding conformity to exhaust and evaporative emission regulations of the United States, Canada, and the State of California and fuel economy regulations of the United States.

This manual should not be relied upon with respect to compliance with any regulation of the Federal Highway Administration or regulations issued pursuant to the Occupational Safety and Health Act (OSHA) or any other Federal, state, or local regulations governing the performance or construction of motor vehicles (except for those requirements shown under the heading "Warranty and Maintenance," page 17, and "Emission Control Information Label," page 18). It is the responsibility of the final stage manufacturer to determine applicability and comply with any federal, state, or local requirements not detailed in this manual.

IMPORTANT: UNITED STATES VEHICLES

Ford Motor Company has endeavored, whenever possible, to state the specific conditions under which an incomplete vehicle may be completed to conform with each applicable Federal Motor Vehicle Safety Standard. These specific statements are intended to aid subsequent stage manufacturers in avoiding instances of inadvertent noncompliance to particular standards. Note that the final responsibility for the compliance of the completed vehicle rests with the final stage manufacturer who is required by law to certify, as prescribed by Section 567.5 of Title 49, Code of Federal Regulations, that the completed vehicle conforms to all applicable Federal Motor Vehicle Safety Standards.

IMPORTANT: UNITED STATES AND CANADIAN VEHICLES

Alterations to an incomplete vehicle by someone other than Ford Motor Company or damage in transit, may affect compliance statements that are represented in this manual or representations that are printed on the label affixed to a chassis cab vehicle.

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UNITED STATES AND CANADIAN VEHICLES SAFETY REGULATIONS

(Vehicles to be completed for sale or use in the United States and Canada)

GENERAL INFORMATION

Information in this manual is provided pursuant to Part 568 of Title 49, of the Code of Federal Regulations, “Vehicles Manufactured in Two or More Stages.”, and Section 6 of the Canadian Motor Vehicle Safety Regulations (CMVSR), "Vehicles Manufactured in Stages". Part 568 specifies that a final stage manufacturer must complete vehicles in compliance with all applicable Federal Motor Vehicle Safety Standards and affix a label to each vehicle it completes in accordance with Part 567.5 of Title 49. Section 6.6 of the CMVSR provides labeling requirements for vehicles that are to be sold in Canada.

STATEMENTS OF CONFORMITY

The Statements of Conformity section, which begin on page 7 of this manual, will list all Federal Motor Vehicle Safety Standards in effect on the date of manufacture that are applicable to the type(s) of completed vehicles into which an incomplete vehicle may be manufactured. This date is shown on the label affixed to the cover of this manual. These statements, in most cases, apply to specific designations of incomplete or completed vehicle types and identify GVWR weight ranges.

The completed vehicle types that this incomplete vehicle may appropriately be completed as is printed on the label, under the heading “May Be Completed As”, that is affixed to the cover of this document.

Each Statement of Conformity is identified by a safety standard number located at the left margin. Because there may be multiple Statements of Conformity for each safety standard, use care when selecting the appropriate statement.

Compliance statements provided in this manual are of the three following types:

Type I A statement that the vehicle, when completed, will conform to the standard if no alterations are made in identified components of the incomplete vehicle.

Type II A statement of specific conditions of final manufacture under which the manufacturer specifies that the completed vehicle will conform to the standard.

Type III A statement that conformity with the standard is not substantially affected by the design of the incomplete vehicle, and that the incomplete vehicle manufacturer makes no representation as to conformity with the standard.

IMPORTANT:

To rely on the compliance representations in this manual, the incomplete vehicle must be completed as one of the complete vehicle type(s) designated on the label affixed to the cover of this manual, and must not exceed the specified GVWR, GAWR, or the vehicle weight limits specified in this manual.

FORD MEDIUM TRUCK ASSISTANCE

Throughout this manual you will find references to information found in the *Ford Truck Body Builders' Layout Boo*k. To obtain a copy of this book or Compact Disk (first copy at no charge), please FAX a written request to "Body Builder Coordinator" and include the desired model year along with your street address (NO PO. BOX ADDRESS PLEASE). U.S. Orders: FAX to (734) 414-2971.

DEFINITIONS

The following definitions are from Title 49, Code of Federal Regulations, Section 571.3, except where noted. Canadian definitions are from Canada Motor Vehicle Safety Regulations, Section 2(1), and are in italics. Ford Motor Company definitions are for the purpose of this manual only. Some terms are followed by an abbreviation that is used throughout this manual.

Auto-Transporter – means a truck and a trailer designed for use in combination to transport motor vehicles, in that the towing vehicle is designed to carry cargo at a location other than the fifth wheel and to load this cargo only by means of the towed vehicle. (49 CFR, Section 571.121)

Auto Transporter - (Canada) - means a truck and a trailer designed for use in combination to transport motor vehicles where the truck is designed to carry cargo other than at the fifth wheel and that cargo is to be loaded only by means of the trailer.

Bus – means a motor vehicle with motive power, except a trailer, designed for carrying more than 10 persons

Bus (Canada) – means a vehicle having a designated seating capacity of more than 10, but does not include a trailer or a vehicle imported temporarily for special purposes

Chassis Cab – means an incomplete vehicle, with completed occupant compartment, that requires only the addition of cargo-carrying, work-performing, or load-bearing components to perform its intended function. (49 CFR, Section 567.3)

Final Stage Manufacturer – means a person who performs such manufacturing operations on an incomplete vehicle that it becomes a completed vehicle. (49 CFR, Section 568.3)

Gross Axle Weight Rating (GAWR) – means the value specified by the vehicle manufacturer as the load-carrying capacity of a single axle system, as measured at the tire-ground interface.

Gross Combination Weight Rating (GCWR) – means the value specified by the manufacturer as the loaded weight of a combination vehicle.

Gross Vehicle Weight Rating (GVWR) – means the value specified by the manufacturer as the loaded weight of a single vehicle.

Incomplete Vehicle (Canada) -

(a) other than a vehicle imported temporarily for special purposes, that is capable of being driven and that consists, at a minimum, of a chassis structure, power train, steering system, suspension system and braking system in the state in which those systems are to be part of the completed vehicle, but requires further manufacturing operations to become a completed vehicle, or

(b) that is an incomplete trailer

Incomplete Vehicle Manufacturer – means a person who manufactures an incomplete vehicle by assembling components none of which, taken separately, constitute an incomplete vehicle. (49 CFR, Section 568.3)

Intermediate Manufacturer – means a person, other than the incomplete vehicle manufacturer or the final stage manufacturer, who performs manufacturing operations on an incomplete vehicle. (49 CFR, Section 568.3)

Subsequent Stage Manufacturer – is a term which means either intermediate or final stage manufacturers or both. (source: Ford Motor Company).

Truck – means a motor vehicle with motive power, except a trailer, designed primarily for the transportation of property or special purpose equipment.

Truck (Canada) – means a vehicle designed primarily for the transportation of property or special-purpose equipment but does not include a competition vehicle, a crawler-mounted vehicle, a trailer, a work vehicle, a vehicle imported temporarily for special purposes or vehicle designed for operation exclusively off-road.

Truck Tractor – means a truck designed primarily for drawing other motor vehicles and not so constructed as to carry a load other than a part of the weight of the vehicle and the load so drawn.

Truck Tractor (Canada) – means a truck designed primarily for drawing other vehicles and not constructed for carrying any load other than a part of the weight of the vehicle and load drawn, and includes a vehicle designed to accept a fifth-wheel coupling but does not include a crane-equipped breakdown vehicle.

VEHICLE DESCRIPTION

INCOMPLETE VEHICLE MANUAL COVER

The cover of this manual identifies the incomplete vehicle configuration for which compliance representations are contained in this manual. Also, a label is affixed to the cover which includes the Vehicle Identification Number (VIN) for the specific vehicle to which this manual belongs. The label identifies the following information, which pertains only to the vehicle with the corresponding VIN:

- The GVWR / PNBV
- Suitable tire and wheel size
- The front and rear GAWR / PNBE
- Cold tire inflation pressure (PSI) (KPA)
- Completed vehicle type(s) into which the incomplete vehicle may be completed

INCOMPLETE VEHICLE LABEL

Each incomplete vehicle sold by Ford Motor Company will have an incomplete vehicle label affixed to the driver door pillar. This label is required by law and must not be removed by any subsequent stage manufacturer.

STATEMENTS OF CONFORMITY

The following Statements of Conformity apply as specified to vehicles that are produced for sale or importation into the United States or Canada.

The following Statements of Conformity apply to the type of vehicle illustrated on the cover of this manual and as defined in the Definitions section on page 5. The number preceding each Statement of Conformity refers to the number designation of a Federal Motor Vehicle Safety Standard, unless otherwise noted.

The statements provided for each safety standard number are appropriate compliance representations of each Canadian safety standard number if this incomplete vehicle, identified by the VIN on the front cover of the document, was sold by Ford Motor Company for sale or use in Canada, except as may be noted at the conclusion of each safety standard number.

Part
565.4 – The following statement is applicable to the Chassis Cab:

This vehicle, when completed, will conform to Part 565.4, Vehicle Identification Number, if the vehicle identification number mounted on the top of the instrument panel is not removed, altered, or modified and no actions are taken by the subsequent stage manufacturer that would obstruct the readability of the Vehicle Identification Number mounted on the top of the instrument panel.

101 – The following statement is applicable to the Chassis Cab:

This vehicle, when completed, will conform to Standard 101, Controls and Displays, if:

- The controls, displays, control and display identifications, and/or driver's seat supplied by Ford Motor Company are not removed, altered, or relocated.
- The components, wiring, and power supply provided by Ford Motor Company to illuminate any control, display or control/display identification are not removed or altered to affect lighting performance.
- Components added to the vehicle do not obstruct the driver's ability to operate or visually locate the controls, displays, and their identifications.
- Any controls, displays, and illumination added to this vehicle must meet any applicable requirements of this Standard.

102 – The following statement is applicable to the Chassis Cab:

This vehicle, when completed, will conform to Standard 102, Transmission Shift Lever Sequence, Starter Interlock, and Transmission Braking Effect, if no alterations or adjustments are made to:

- The transmission shift decal, knob, or transmission indicator dial Identification.
- On automatic transmission equipped vehicles, the transmission, shift linkage, shift lever, and the starter interlock switch and wiring circuit from the interlock switch to the power source.

If an auxiliary transmission is added to the vehicle, it must conform to the requirements of this standard.

103 – The following statement is applicable to the Chassis Cab:

This vehicle, when completed, will conform to Standard 103, Windshield Defrosting and Defogging Systems, if no alterations or adjustments are made to heater and blower assemblies, ducting, operating controls, electrical circuit from the blower assembly to the power source, windshield, and the coolant hoses from the radiator to the heater, and if no obstructions are added that restrict or otherwise redirect the air flow from the defroster outlets to the windshield.

104 – The following statement is applicable to the Chassis Cab:

This vehicle, when completed, will conform to Standard 104, Windshield Wiping and Washing Systems, if no alterations are made to the windshield, the windshield wiping and washing system, including the electrical circuit from the windshield wiping and washing motors to the power source, or if air actuated, the air supply lines and compressor; and if no obstructions are added that restrict or otherwise redirect fluid flow from the washer nozzles to the windshield.

105 – The following statement is applicable to a Chassis Cab equipped with hydraulic brake systems:

The vehicle, when complete, will conform to Standard 105, Hydraulic and Electric Brake Systems, if:

- The center of gravity height to wheelbase ratio of the completed vehicle is 0.41or less and the overall vehicle center of gravity height is not to exceed 68 inches for a truck or 54 inches for a non-school bus when loaded to a weight not exceeding GVWR* distributed proportionally to the GAWR's*.

*GVWR and GAWR as indicated on the cover of this manual.

105 – *Continued*

- As a guide, the vertical center of gravity height of the incomplete vehicle, as sold by Ford Motor Company, may be assumed to be the distance from the ground to the top of the frame siderail measured at the longitudinal midpoint of the vehicle.
- For single rear axle models - determine the frame rail height of the unladen chassis-cab.
- The vehicle is equipped with the tires and wheel-rims installed on the vehicle as sold by Ford Motor Company.
- Modifications have not been made to the suspension or steering systems of the vehicle, as sold by Ford Motor Company, which could in any way adversely affect vehicle or related brake system performance.
- Additional axles have not been added to the vehicle as sold by Ford Motor Company and the GVWR and GAWR are identical to the incomplete vehicle ratings on the cover of this manual.
- Electrical or mechanical components and related wiring of the warning systems installed on the incomplete vehicle as sold by Ford Motor Company are not modified in any way.
- Other than as provided above, there have been no modifications, deletions, replacements, or alterations to any component or related hardware of the hydraulic brake system installed on the vehicle as sold by Ford Motor Company.

106 – The following statement is applicable to the Chassis Cab:

This vehicle, when completed, will conform to Standard 106, Brake Hoses, if the brake hose assemblies supplied by Ford Motor Company are not removed, altered, or replaced and if no brake hose assemblies are added.

108 – The following statement is applicable to the Chassis Cab:

This vehicle, when completed, will conform to Standard 108, Lamps, Reflective Devices, and Associated Equipment, if all the required lighting equipment as indicated in Table 1 (identified by the codes R and S) is designed and installed in accordance with the requirements of Standard 108 and the directions contained in this statement. Additionally, if the completed vehicle width is 80 or more inches or the overall length is 30 or more feet, front and rear clearance lamps, and front and rear identification lamps, intermediate side marker lamps, and reflex reflectors (not supplied by Ford Motor Company) are also required respectively for compliance with Standard 108.

The items of equipment that are supplied by Ford Motor Company (identified by the code S in Table 1 which follows) are designed and installed to conform to all the requirements of Standard 108. The completed vehicle will conform as to these components if the subsequent stage manufacturer does not remove, alter, replace, or relocate such equipment or modify the power supply or wiring to such equipment, and does not complete the body in such a configuration as to impair the visibility and conformity to the photometric requirements of the installed lamps and reflective devices.

Specific requirements for lighting and associated equipment are listed by incomplete vehicle type in Table 1 which follows.

108 – *Continued*

Lamps, reflective devices, and associated equipment necessary to complete the vehicle from the incomplete vehicle stage must conform to the equipment, location, special wiring, visibility, photometric, and performance requirements of Standard 108 and to the applicable SAE standards or recommended practices referenced or sub-referenced in this Standard.

All electrical equipment added to the vehicle by subsequent manufacturers must conform to the wiring practices set forth in the Electrical Wiring Section of the appropriate Ford Truck Body Builders' Layout Book.

TABLE 1

	Chassis Cab Completed As Truck or Bus 80 or More Inches Wide	Chassis Cab Completed As Truck Tractor 80 or More Inches Wide
Headlamps	**S**	**S**
Taillamps	**S**	**S**
Stoplamps	**S**	**S**
License Plate Lamps	**S**	**S**
Reflex Reflectors - Side Front	**S**	**S**
- Side Intermediate	**R**	**R**
- Side Rear	**R**	**N**
- Rear	**S**	**S**
Side Marker Lamps - Front	**S**	**S**
- Intermediate	**R[2]**	**R[2]**
- Rear	**R**	**N**
Back-Up Lamps	**S**	**S**
Turn Signal Lamps - Front	**S**	**S**
- Rear	**S**	**S**
Turn Signal Operating Unit	**S**	**S**
Turn Signal Flasher	**S**	**S**
Vehicle Hazard Warning Operating Unit	**S**	**S**
Vehicle Hazard Warning Flasher	**S**	**S**
Identification Lamps - Front	**S[3]**	**S[3]**
- Rear	**R**	**N**
Clearance Lamps - Front	**S[3]**	**S[3]**
- Rear	**R**	**N**
Retroreflective Material		
- Back of Cab or Sleeper	**N**	**S[1]**
- Rear Mud Flaps	**N**	**S**

S: Required for completed vehicle; supplied with incomplete vehicle
R: Required for completed vehicle; not supplied with incomplete vehicle
N: Not required for completed vehicle

1: Retroreflective material for installation is supplied for Truck-Tractors ordered without mud flaps
2: Required only if vehicle is over 30 feet long
3: Lamp not supplied if vehicle is ordered with lamp omit code.

108 – Canadian Requirements:

The preceding statements for FMVSS 108 are appropriate compliance representations for CMVSS 108, Lighting Systems and Retroreflective Devices, and CMVSS 108.1, Alternative Requirements for Headlamps, if this incomplete vehicle was manufactured for sale or use in Canada, provided:

- No component of the Daytime Running Lamp (DRL) system is removed relocated, or modified.
- No DRL module circuits are altered.
- The DRL module is not repositioned.

111 – The following statement is applicable to the Chassis Cab:

This vehicle, when completed, will conform to Standard 111, Rearview Mirrors ,if:

- The mirrors and their mounts as supplied by Ford Motor Company, are not removed, relocated, replaced, or altered, except as noted below.
- No structural modifications are made to the body which would affect the stability of the mirror mounts.
- Any modifications or additions made to this incomplete vehicle do not adversely affect the driver's view to the rear along both sides of the vehicle.
- The driver's seat is not replaced, relocated, or modified.

113 – The following statement is applicable to the chassis cab:

This vehicle, when completed, will conform to Standard 113, Hood Latch Systems, if the hood latch system is not removed or altered.

115 - Canadian Requirements:

The following statements are appropriate compliance representations for CMVSS 115, Vehicle Identification Number, if this Chassis Cab was manufactured for sale or use in Canada.

This vehicle, when completed, will conform to Standard 115, Vehicle Identification Number, if the VIN identification supplied by Ford Motor Company is not removed, altered, or modified.

116 – The following statement is applicable to all chassis cab vehicles with hydraulic brake systems:

This vehicle, when completed, will conform to Standard 116, Motor Vehicle Brake Fluids, provided that any brake fluid added or replaced conforms to the DOT 3 specifications of the standard and contaminants are not introduced, into the hydraulic brake system.

119 – The following statement is applicable to the Chassis Cab:

All tires supplied by Ford Motor Company are in full conformity with Standard 119, New Pneumatic Tires for Vehicles Other Than Passenger Cars.

For tires not supplied by Ford Motor Company, conformity is not substantially affected by the design of the incomplete vehicle; accordingly, Ford makes no representation as to conformity with this standard.

120 - The following statement is applicable to the Chassis Cab:

This vehicle, when completed, will conform to the requirements of Standard 120, Tire Selection and Rims for Motor Vehicles Other Than Passenger Cars, if the tire or wheel-rim assemblies and the Incomplete Vehicle Label, affixed to all vehicles, are not removed, altered, or replaced and if size designation, cold inflation pressure, and other information specified by Standard 120 is provided on the certification label of the completed vehicle.

121 – Exemptions - Standard 121, Air Brake Systems

The following statements concerning Standard 121 do not apply to

- Any vehicle equipped with an axle that has a GAWR of 29,000 pounds or more.
- Any truck or bus that cannot attain a speed greater than 33 mph in 2 miles.
- Any truck that cannot attain a speed greater than 45 mph in 2 miles, has an unloaded weight that is 95% or more of the GVWR, and has no capacity to carry passengers other than the operating crew.

121 - The following statement is applicable to the Chassis Cab, with air brake systems:

The vehicle, when completed, will conform to Standard 121, Air Brake Systems, if:

- The center of gravity height to wheelbase ratio of the completed vehicle is less than or equal to 0.41 for front axles less than or equal to 12,000 pounds; or less than or equal to 0.45 for front axles greater than 12,000 pounds; and the overall vehicle center of gravity height does not exceed 54 inches for a bus, 68 inches for single rear axle truck, and 75 inches for trucks with more than one rear axle when loaded to a weight not exceeding GVWR* distributed proportionally to GAWR's*. The vertical center of gravity height of the incomplete vehicle, as sold by Ford Motor Company, may be assumed to be the distance from the ground to the top of the frame siderail measured at the longitudinal midpoint of the vehicle.
- The vehicle is equipped with the tires and wheel-rims provided on the vehicle by Ford Motor Company
- There have been no modifications to the engine, air compressor, or engine/compressor drive system, as provided by Ford Motor Company, which affect the maximum governed engine speed (RPM) or related air compressor performance at engine maximum governed speed (RPM).
- No connections are made into (1) the air line tubing or fittings for the parking brake system, (2) the rear axle emergency system (modulated spring brake system), (3) the air supply and signal lines to the rear chassis relay valve(s), or (4) the air delivery lines to the front axle brakes and quick release valve.
- No connections are made between the check valve and the reservoir port for air supply.

- Additional reservoir(s) added to the vehicles, as sold by Ford Motor Company, are equipped with manually operated drain valve(s) for each air reservoir added. For reservoir volume added to the air system, the compressor build-up time from 85 psi to 100 psi at the engine's maximum recommended RPM shall be less than S where:

$$S = \frac{Vm + Va}{Vr} \text{ X25}$$

S = Time in seconds.
Vm = Reservoir volume for vehicle as received from Ford Motor Company.
Va = Accessory reservoir volume.
Vr = Reservoir volume required to meet FMVSS-121 = total air brake chamber rated volume Xl2.

- Each added reservoir shall be capable of withstanding an internal hydrostatic pressure of five times the compressor cutout pressure or 500 psi, whichever is greater, for 10 minutes.
- Modifications have not been made to the suspension or steering systems of the vehicle, as sold by Ford Motor Company, which could, in any way, adversely affect vehicle or related brake system performance.
- Electrical or mechanical components and related wiring of the pressure warning system, provided by Ford Motor Company on the incomplete vehicle, have not been modified in any way.
- Additional axles have not been added to the vehicle as sold by Ford Motor Company and the GVWR and GAWR are identical to the incomplete vehicle ratings on the cover of this manual.
- Other than as provided above, there have been no modifications, deletions, replacement, or alterations to any component or related hardware of the air brake system provided on the vehicle by Ford Motor Company.

124 - The following statement is applicable to the Chassis Cab:

This vehicle, when completed, will conform to Standard 124, Accelerator Control Systems, if:

- No alterations are made to the accelerator control rod, bellcranks, cables, wiring harness, connectors, springs, guides, accelerator pedal, mounting hardware, or other components of the accelerator control system as sold by Ford Motor Company.
- Other equipment is not added or existing equipment modified which would restrict operation of the accelerator control system.

205 – The following statement is applicable to the Chassis Cab:

This vehicle, when completed, will conform to Standard 205, Glazing Materials, if no alterations to or replacements of the installed glazing materials are made and if additional glazing materials installed by a subsequent stage manufacturer conform to the requirements of Standard 205.

206 – The following statement is applicable to the Chassis Cab when completed as a truck:

This vehicle, when completed, will conform to Standard 206, Door Locks and Door Retention Components, if no alterations or adjustments are made to the door or door pillar structure, door locks, door latches, striker plates, hinges, and attaching hardware as sold by Ford Motor Company.

Additional doors added to this incomplete vehicle by a subsequent stage manufacturer must be equipped with door locks and door retention components that conform with this Standard.

207 – The following statement is applicable to the Chassis Cab:

This vehicle, when completed, will conform to Standard 207, Seating Systems, if no alterations are made to the seat assemblies, their anchorages, the floor pan, floor pan reinforcements, and the cab rear sill (chassis cab types), and if no additional seats are added.

208 – The following statement is applicable to the Chassis Cab:

This vehicle, when completed, will conform to Standard 208, Occupant Crash Protection, if no deletions or replacements are made to the seat belts, or attaching hardware, and if no action by subsequent manufacturers is taken which would impair the integrity of the seat belt system.

209 – The following statement is applicable to the Chassis Cab:

This vehicle, when completed, will conform to Standard 209, Seat Belt Assemblies, if no alterations or replacements are made to the seat belt assemblies and, attaching hardware, and if no action is taken by subsequent manufacturers to impair the integrity of the seat belt system provided and if no additional belt assemblies are added.

210 – The following statement is applicable to the Chassis Cab:

This vehicle, when completed, will conform to Standard 210, Seat Belt Assembly Anchorages, if no alterations are made to the seat belt anchorages, seat belt assemblies, the floor pan, floor pan reinforcements, and the rear cab sills, and if no seat belt assemblies, lap belt anchorages, or shoulder belt anchorages are added

213 - The following statement is applicable to the Chassis Cab:

Standard 213, Child Restraint Systems, has not substantially affected the design of this incomplete vehicle; accordingly, Ford Motor Company makes no representation as to conformity with this Standard.

217 - The following statement is applicable to the Chassis Cab:

Standard 217, Bus Emergency Exits and Window Retention and Release, has not substantially affected the design of this incomplete vehicle; accordingly, Ford Motor Company makes no representation as to conformity with this Standard.

302 - The following statement is applicable to the Chassis Cab:

This vehicle, when completed, will conform with Standard 302, Flammability of Interior Materials, if no alterations are made to those components covered by the Standard which are provided by Ford Motor Company and all components covered by Standard 302, which are added to the incomplete vehicle by subsequent stage manufacturers, meet flammability requirements of the Standard.

403 - The following statement is applicable to the Chassis Cab:

Standard 403, Platform Lift Systems for Motor Vehicles, has not substantially affected the design of this incomplete vehicle; accordingly, Ford Motor Company makes no representation as to conformity with this Standard.

404 - The following statement is applicable to the Chassis Cab:

Standard 404, Platform Lift Installations in Motor Vehicles, has not substantially affected the design of this incomplete vehicle; accordingly, Ford Motor Company makes no representation as to conformity with this Standard.

1106 - The following statements are applicable to Chassis Cabs with GVW ratings of more than 4536 kg [10,000lb]:

This vehicle, when completed, will conform to Standard 1106, Noise Emissions, Section 4, if noise control devices or elements of design are not modified removed or rendered inoperative. Examples of such devices or elements of design are:

- Fender apron absorbers, fender apron barriers, underbody noise shields and acoustic absorption material.
- Engine speed governor or electronic control intended to control maximum engine speed.
- Engine air duct, air intake choke or silencer, air cleaner and air cleaner element.
- Exhaust system components including the catalyst inlet pipe, muffler, outlet pipe, resonator and diffuser.
- Engine cooling fan and cooling fan clutch.

COMPLIANCE WITH EXHAUST EMISSIONS, FUEL VAPOR RECOVERY, WARRANTY AND MAINTENANCE, LABELING, NOISE, AND RFI

Caution:
U.S.: Vehicles are emission certified for registration in specific areas of the United States. The subsequent stage manufacturer must purchase a vehicle certified for the intended state/area in which the vehicle is intended to be registered.
CANADA: If the completed vehicle is intended for sale or use in Canada, the intermediate or final stage manufacturer must insure that the incomplete vehicle is ordered through a Canadian dealer or is ordered from Ford Motor Company with the appropriate Canadian market option code. Failure to do so may result in an incomplete vehicle that is built with an emissions system and labeling that are not in compliance with the requirements of the Canadian Environmental Protection Act.

EXHAUST EMISSIONS
All Heavy Duty engines (for Canada and all U.S. States except California, a Heavy Duty engine is an engine used to propel a vehicle exceeding 8500 pounds GVWR or 6000 pounds curb weight, or that exceeds 45 square feet of frontal area, for California a Heavy Duty engine is an engine used to propel a vehicle in excess of 6000 pounds GVWR) have been certified to the applicable Federal and California exhaust emissions and evaporative emissions requirements for Heavy duty engines. Additional emissions certification information is contained in the Ford Body Builders' Layout Book for the model year and type of this incomplete vehicle. The label affixed to the cover of this manual states the maximum GVWR and GAWR's to which the vehicle may be completed. It is the responsibility of the subsequent manufacturer to assure that the completed vehicle is consistent with the weight class for which the engine was certified.

Body builders, installers, or any other subsequent stage manufacturer may not delete or make modifications that disable the engine emission control hardware furnished with incomplete vehicles. Any instructions pertaining to incorporation of such hardware into the completed vehicle's electrical or mechanical systems should be strictly followed.

If the body builder, installer, or subsequent stage manufacturer adds additional weight to the vehicle, beyond Ford's GVWR, or makes any modification, revision, or removal of a component included in the emissions certification application that applies to that engine or vehicle, or otherwise alters the effectiveness of the exhaust emissions control system, permission must be obtained from the United States Environmental Protection Agency by the body builder, installer, or subsequent manufacturer making such modification, revision, or removal prior to distribution, sale, offering for sale, introduction, or delivery for introduction of the subject vehicle into U.S. Commerce. In Canada, this same requirement applies, and permission must be obtained from Environment Canada. Additionally, any body builder, installer, or subsequent stage manufacturer making such addition, modification, revision, removal, or alteration must obtain approval from the California Air Resources Board (CARB) if the new vehicle will be delivered for sale or use in the State of California.

WARRANTY AND MAINTENANCE (U.S. & Canada)

A copy of the appropriate Ford Truck Owner's Guide and Warranty Guide must be installed in every vehicle prior to sale to the ultimate purchaser in order to provide emission systems warranty information and maintenance schedules. It also provides noise emissions warranty information, instructions for maintenance, use, and repair of vehicle noise emission control systems, a maintenance record format, and a list of prohibited tampering acts.

If the body builder, installer, or subsequent stage manufacturer adds additional weight to the vehicle beyond Ford's GVWR, modifies, revises, or removes a component included in the emissions certification application that applies to that engine or vehicle, alters the effectiveness of the exhaust emissions control system, adds to or modifies the fuel system in any manner, or otherwise alters the effectiveness of the evaporative emissions system, the modifier will be responsible for and will assume all liability for all emissions warranty claims and/or emissions recall actions.

CALIFORNIA MOTOR VEHICLE EMISSION CONTROL LABEL

To meet California emission certification regulations, the Emission Control information (tune-up) label must be welded, riveted, or otherwise permanently attached to an area within the engine compartment or to the engine in such a way that it will be readily visible to the average person after installation of the engine in a vehicle. In selecting an acceptable location, the manufacturer shall consider the possibility of accidental damage (e.g., possibility of tools or sharp instruments coming in contact with the label). The label shall be affixed in such a manner that it cannot be removed without being destroyed or defaced, and shall not be affixed to any part which is likely to be replaced during the vehicle's useful life. As used in these specifications, readily visible to the average person shall mean that the label shall be readable from a distance of 460 cm (18 in.) without any obstructions from vehicle or engine parts (including all manufacturer available optional equipment), except for flexible parts, (e.g., vacuum hoses, ignition wires). Alternatively, information required by these specifications to be printed on the label shall be no smaller than 8 point type size provided that no vehicle or engine parts (including all manufacturer available optional equipment), except for flexible parts that can be moved out of the way without disconnection, obstruct the label.

Completed vehicles for retail sale in California require a machine-readable vehicle identification number (VIN) bar-code label made of paper, plastic, metal, or other permanent material which shall be affixed in a readily visible location to either the door-latch post next to the driver's seating position, the door edge that meets this door-latch post, or above the instrument panel in a location clearly visible through the lower left corner of the windshield. All Incomplete Chassis Cab Type Vehicles will conform to this standard.

Sufficient clearance shall be provided to use a non-contact bar-code Reading Wand. For the tune-up label and vacuum hose routing diagram label, the label and any adhesives used shall be designed to withstand degradation for the vehicle's total expected life and typical vehicle environmental conditions in the area where the label is attached. Typical vehicle environmental conditions shall include, but are not limited to, exposure to engine lubricants and coolants (e.g., gasoline, motor oil, brake fluids, water, ethylene glycol), underhood temperatures, steam cleaning, and paints or paint solvents.

EMISSION CONTROL INFORMATION LABEL

To meet United States Environmental Protection Agency and Environment Canada regulations, the Important Vehicle Information (tune-up and fuel tank capacity) label must be affixed in a location that is readily visible after installation and in such a manner that it cannot be removed without destroying or defacing the label. The label shall not be affixed to any equipment that is easily detached from such vehicle.

When emission control labels are supplied but not attached to the vehicle (i.e., tune-up label or fuel tank label), they must be permanently mounted in a readily visible location to meet the preceding requirements. In addition, whether the label is already affixed or to be affixed, no components shall be installed which obscure the label in any way that fails to satisfy the visibility requirements described in the California Emission Control Label Specifications.

EXTERIOR NOISE

New trucks that have a gross vehicle weight rating in excess of 4538 kg (10,000 lb.), include a partially or wholly enclosed operator's compartment, and are manufactured for use in the United States, must comply with the U.S. Environmental Protection Agency's exterior noise emission regulations for medium and heavy trucks (40 CFR Part 205, Subpart B) which establish a noise emission limit of 80 dB(A).

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED

Federal law prohibits the following acts or the causing thereof: (1) the removal or rendering inoperative by any person, other than for purposes of maintenance, repair, or replacement, of any device or element of design incorporated into such vehicle for the purpose of noise control, prior to its sale or delivery to the ultimate purchaser or while it is in use, or (2) the use of such vehicle after such device or element of design has been removed or rendered inoperative by any person.

Among those acts presumed to constitute tampering are the acts listed below:

- Removal of hood blanket, fender apron absorbers, fender apron barriers, underbody noise shields, or acoustical absorptive material.
- Removal of or rendering inoperative the engine speed governor, so as to allow engine speed to exceed manufacturer's specifications.
- Removal of the air duct, air cleaner, or air cleaner element.
- Removal of, or rendering inoperative, exhaust system components including the muffler, outlet pipe, resonator, or diffuser.
- Removal of the fan shroud. Removal of the fan clutch or rendering it inoperative.

INTERIOR AND EXTERIOR NOISE - CANADA

Completed vehicles manufactured for sale in Canada must comply with applicable provisions of Canada Motor Vehicle Safety Standard 1106, Noise.

Additional noise emissions information is contained in the *Ford Truck Body Builders' Layout Book* for the year and type of this incomplete vehicle.

RADIO FREQUENCY INTERFERENCE (RFI)

All vehicles powered by spark ignition engines (e.g.: gasoline or propane engines) that are manufactured by Ford in Canada or for sale or use in Canada are designed to be capable of compliance with the Canadian "Regulations for the Control of Interference to Radio Reception" per Interference Causing Equipment Standard ICES-002, when tested in according to CAN/CSA-C108.4-M92 test methods. A written notice, in the form of a label, must be affixed to the vehicle to indicate compliance.

With respect to incomplete vehicles, Ford has no control over how an incomplete vehicle is completed by subsequent stage manufacturers. Therefore, Ford does not represent that the completed vehicle incorporating the Ford-built components will comply with those requirements. Any ignition system component that is replaced would be re-placed by the same Ford Motor Company part number or equivalent, to maintain RFI suppression.

While there are currently no RFI regulations in the United States specifically applicable to automotive ignition systems, all Ford Medium Trucks and Buses are built with ignitions system components the same or equivalent to those supplied on Canadian vehicles. Ford Motor Company recommends that all ignition system service be performed at a Ford authorized service facility to help hold RFI emission levels to a minimum.

Devices that emit radio frequency (RF) energy such as AM/FM radios, mobile telecommunications systems (two-way radios, telephones), and radio-controlled security systems are subject to the rules and regulations of the Federal Communications Commission (FCC) 47 CFR Parts 2 and 15. Any such system installed in a vehicle should comply with those rules and should be installed only by a qualified technician. In addition, to insure continued compliance with the FCC's regulations, RF devices must not be modified or changed in a manner not expressly approved by Ford Motor Company.

Mobile communication systems, particularly if not properly installed, may adversely affect the operation of the vehicle. For example, such systems, when operated, may cause the engine to stumble or stall. In addition, such systems themselves may be damaged or their operation affected by the operation of the vehicle. (Citizens Band (CB) transceivers, garage door openers, and other transmitters whose power output is 5 watts or less, ordinarily will NOT affect vehicle operation.) Because Ford has no control over the operation or manufacture of such systems or their installation, Ford cannot assume responsibility for any adverse effects or damage if this equipment is used

CAUTION: Tire inflation pressure must not exceed the recommendations of the tire and wheel-rim manufacturer for the specific load, speed, and applications. Inflation pressures indicated on the tire sidewall do not take into account the wheel-rim capabilities. Tires should not be inflated above that recommended in this manual without first consulting the manufacturer or dealer of the specific tires and wheel-rims on your vehicle.

CAUTION: Tire traction characteristics will affect vehicle stopping performance and must also be considered in selecting tires for vehicles to which FMVSS 105 and 121 apply.

NOTE: Consult a Ford Dealer, Ford U.S. Area Sales Office or Ford of Canada Regional Sales Office for permissible GAWR and GVWR packages.

VEHICLE STORAGE - MAINTENANCE TIPS

General
- Store the vehicles in dry ventilated places; protect them from sunlight if possible.
- If vehicles are stored outside, provide regular maintenance against rust and damage.

Body
- Wash the vehicles thoroughly to remove dirt, grease, oil, tar, or mud from the exterior surfaces, rear wheel housings, and underside of front fenders.
- Periodically wash trucks and buses stored in exposed locations.
- Touch-up exposed raw or primed metal to provide rust protection.
- Cover chrome and stainless steel parts with a thick coat of auto wax to help prevent discoloration. Re-wax as necessary when the vehicle is washed.
- Lubricate all hood and door hinges and latches with a light grade oil. CAUTION: Keep all rubber parts free from oil and solvents.
- Cover interior soft trim to prevent fading if the vehicles are stored in exposed locations.

Engine
- Start the engine every fifteen (15) days and move vehicle at least 25 feet. Run the engine at fast idle until it reaches normal operating temperature.
- Shift the transmission into all gears while engine is running.

Fuel System

Diesel fuel deterioration in the form of fuel separation, sludge formation, and bacterial growth can cause restrictions in fuel supply lines, filters, and sticking of fuel injection system components.

A commercially available diesel fuel stabilizer (“Fuel Prep™ 1000” or equivalent) should be added to diesel-powered vehicles whenever actual or expected storage periods exceed 60 days. The manufacturer’s instructions, packaged with the product, should be followed. The vehicle should then be operated at an idle speed to circulate the additive throughout the fuel system.

A fuel tank corrosion inhibitor (“NOX-RUST® VCI 105” or equivalent) added to the fuel will protect the fuel tank inner surface from corrosion. Follow the instructions packaged with product.

Cooling System
- Maintain appropriate anti-freeze protection against freezing temperatures.

Battery
- Check and recharge the battery as necessary. Keep the connections clean and covered with a light coat of grease.

Brakes
- Make sure the brakes and parking brakes are fully released, and, if appropriate, the wheels are blocked.

Tires
- Maintain the recommended tire inflation pressures.

Miscellaneous
- Make sure all linkages, cables, levers, and clevis pins under the vehicle are covered with a light coat of grease to prevent rust.

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